

β1 control selectable to a level setting. The ventilator support monitor system preferably receives at least one ventilator setting parameter signal, each ventilator setting parameter signal indicative of the level settings of one ventilator setting control, monitors a plurality of sensors, each sensor producing an output signal indicative of a measured ventilation support parameter, to determine the sufficiency of the ventilation support received by the patient, and determines the desired level settings of the ventilator setting controls in response to the received ventilator setting parameter signal and the output signals. The ventilator support monitor system preferably utilizes a trainable neural network to determine the desired level settings of the ventilator setting controls.

In the Specification

Please substitute the following paragraph starting at page 12, line 33 through page 13, line 23 with the following:

β2 In one preferred embodiment shown in Fig. 3, the processing subsystem 30 is shown operatively connected to a plurality of sensors such as a flow rate sensor 53, an exhaled CO2 (ex CO2) sensor 54, a pressure sensor 55, a blood pressure sensor 56, and a SPO2 sensor 57. In this embodiment, it is preferred that the monitor system 10 be responsive to the output signals 51 input into the processing subsystem 40 from, for example: i) the flow rate sensor 53 which is indicative of the flow rate ventilation support parameter of the gas expired/inspired by the patient P within the breathing circuit 22, ii) the gas pressure sensor 55 which is indicative of the pressure ventilation support parameter of the breathing gas within the breathing circuit 22, and iii) the Ex CO2 sensor 54 which is indicative of the exhaled carbon dioxide ventilation support parameter present in the exhaled gas expired by the patient P within the breathing circuit 22 (i.e., the flow rate output signal 51 generated by the flow rate sensor 53, the gas pressure output signal 51 generated by the gas pressure sensor 55, and the Ex CO2 output signal 51 generated by the Ex CO2 sensor 54). Optionally, the monitor system 10 may be responsive to output signals 51 input into the processing subsystem 40 from the output of the blood pressure sensor 56, which is indicative of the blood pressure ventilation support parameter of the patient P, for example the arterial systolic, diastolic, and mean blood pressure of the patient P, and the SPO2 sensor 57 which is indicative of the hemoglobin oxygen

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cont. saturation level ventilation support parameter of the patient P (i.e., the blood pressure output signal 51 generated by the blood pressure sensor 56 and the SPO2 output signal 51 generated by the SPO2 sensor 57).

Please substitute the following paragraph starting at page 13, line 25 through page 14, line 9 with the following:

B3 The flow rate sensor 53, the pressure sensor 55, and the Ex CO2 sensor 54 are preferably positioned between the patient connector 26 and the patient connection tube 25. Alternatively, it is preferred that the pressure sensor 55 be located at the tracheal end of the patient connection tube 25. The flow rate, pressure, and Ex CO2 sensors 53, 55, 54 are exemplified by Novametrics, CO2SMO+ monitor (which has flow rate, pressure, and ExCO2 sensors). The blood pressure sensor 56 and the SPO2 sensor 57 are exemplified by Dynamap, Inc.'s blood pressure sensor and Novametrics, CO2SMO+ monitor's SPO2 sensor. The blood pressure sensor 56 and the SPO2 sensor 57 may be attached to a portion of the patient's body to render the requisite measurements. For example, the blood pressure sensor 56, here for example shown as a blood pressure cuff, is shown attached to the arm of the patient P and the SPO2 sensor 57, which may, for example, be a pulse oximeter, is shown attached to a finger of the patient 12. One skilled in the art will appreciate the blood pressure data may be derived from the SPO2 sensor 57 which eliminates the need for the blood pressure sensor 56.

In the Claims

✓ Please cancel claims 1-38 and add the following new claims:

39. A method for monitoring ventilation support for a patient having an airway, wherein said method comprises:

(1) providing a monitoring system comprising:

B4 (a) a plurality of measuring sensors adapted to monitor the patient, or to monitor a breathing circuit coupled to the airway of the patient, each measuring sensor generating an output signal, and